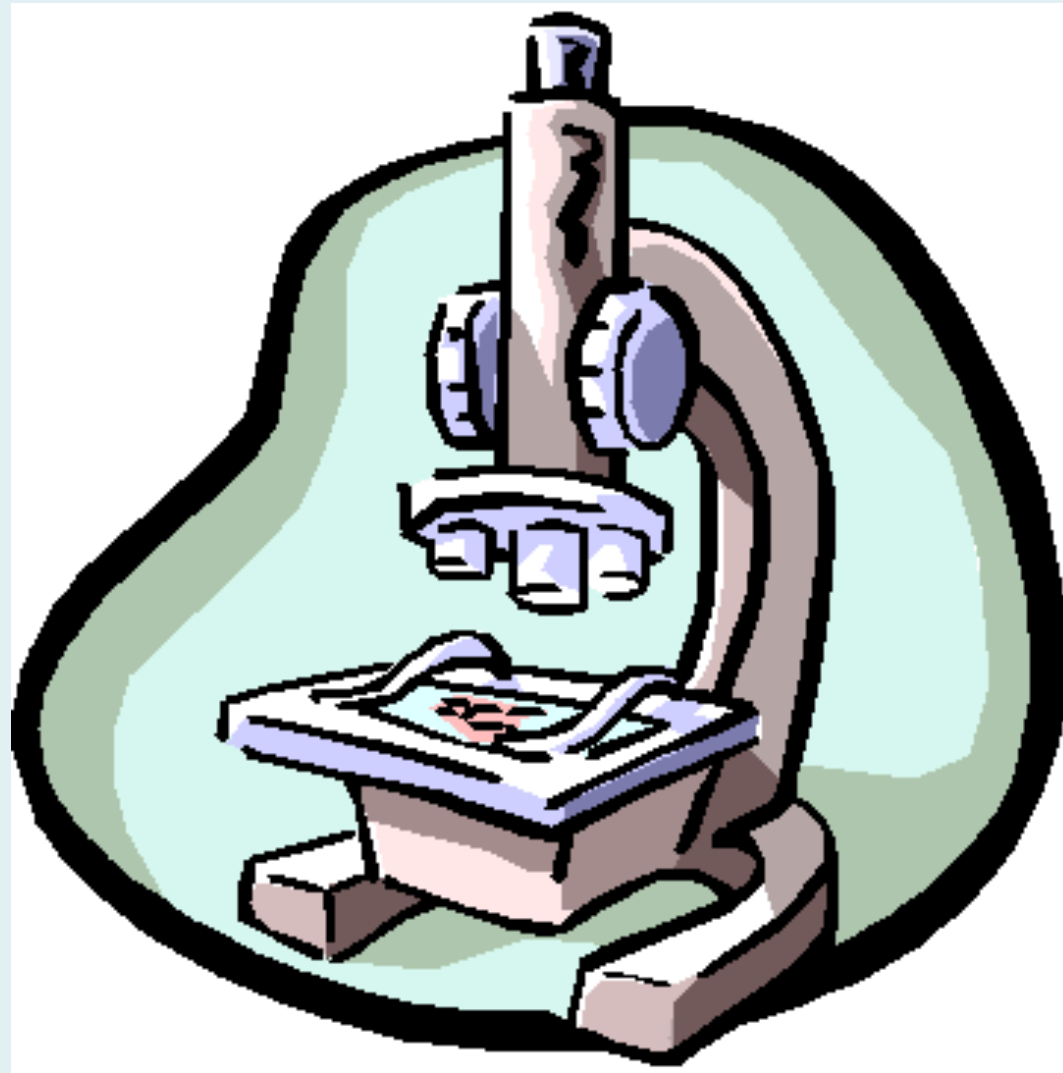
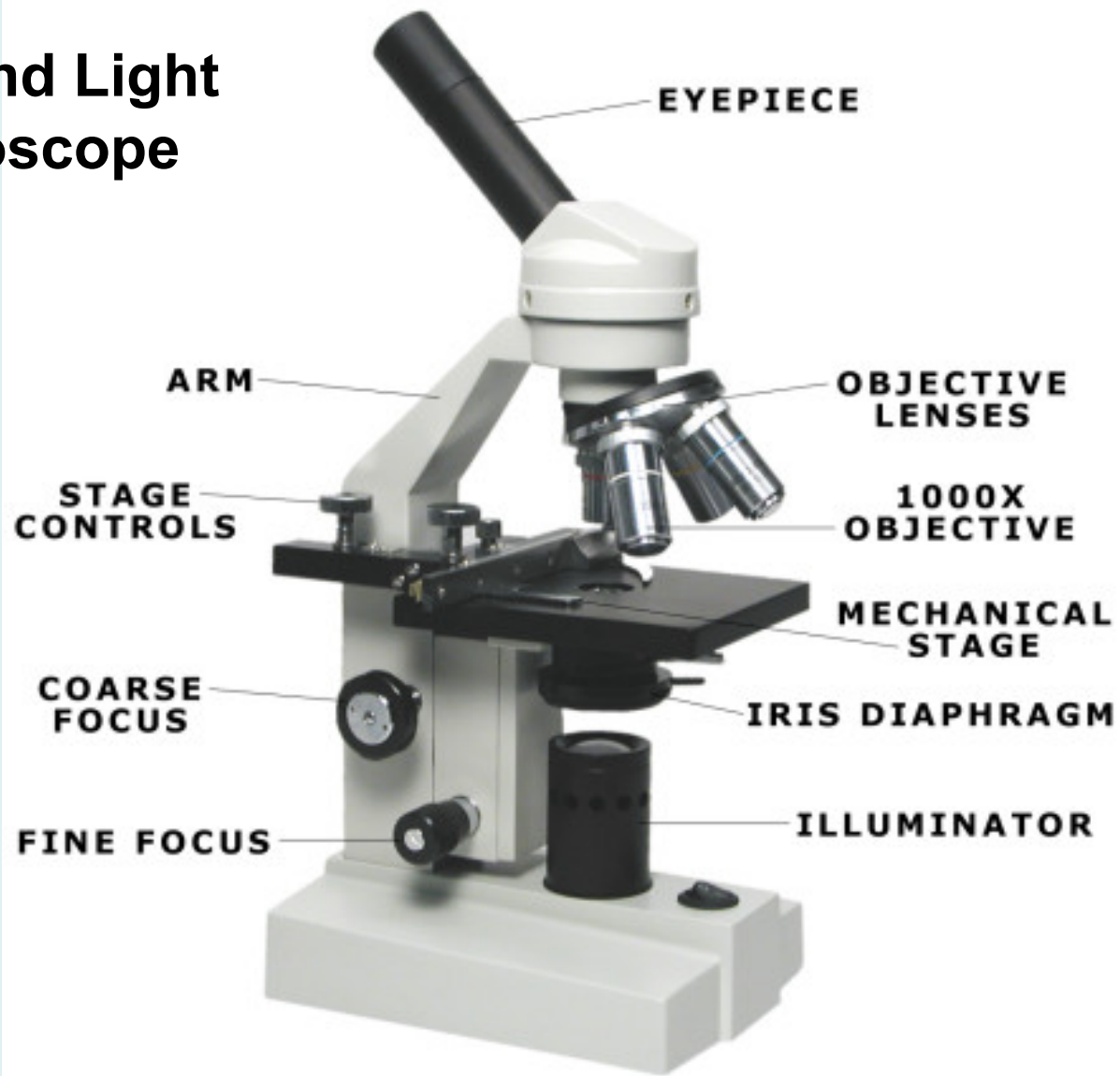


The Light Microscope – A Review



Compound Light Microscope



How to Store the Microscope

1. Clean & dry it if necessary.
2. Put **low power objective** in position.
3. Move the stage all the way up.
4. Wrap the cord around the base.
5. Put the dust cover on the microscope.

How to Carry a Microscope

ABC Rule:

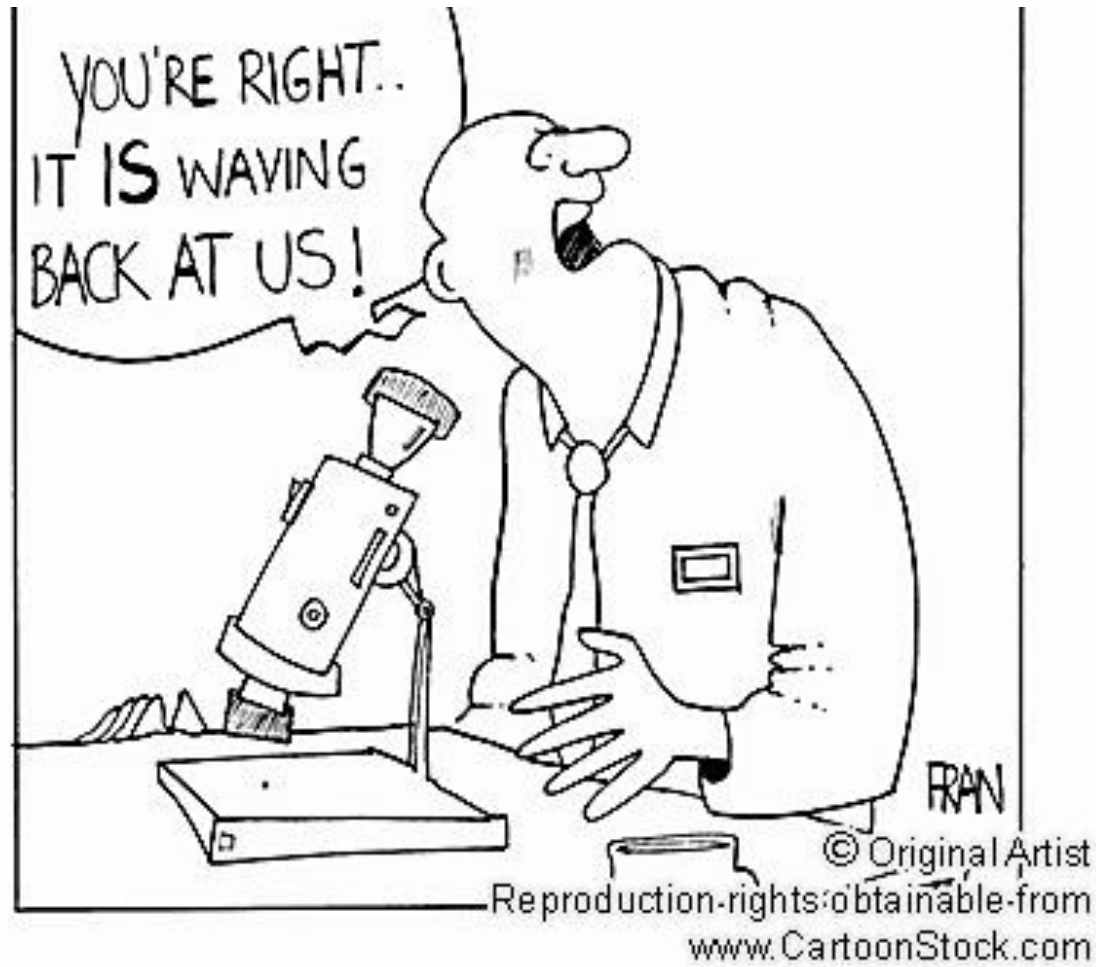
One hand on the **ARM** and the other one on the **BASE** held against your **CHEST**

***Move from the storage location to your work area with care.**

How to Carry a Microscope

Why use the ABC rule?

- Microscopes are precision instruments.
- They are very expensive.
- It cost \$5,000 to overhaul them.
- They were purchased in 1972.
- **LET'S MAKE THEM LAST!**



Plus, microscopes are fun!

At Your Work Station

1. Do not put dust cover under your microscope.
2. Do not slide the microscope across the table.
3. Pick it up and place it down.
4. Plug in microscope. Ensure that the cord is not a safety hazard.
5. Clean the lenses with **Lens Paper ONLY!**
6. Clean the slides and microscope stage with a paper towel.

How to Make a Wet Mount Slide

1. Most slides will require the addition of water.
2. Clean the slide with a paper towel.
3. Place a drop of water on the slide.
4. Thinly slice the specimen and place it in the center of the drop of water (slide).
5. Place cover **slip on at a 45° angle** to avoid trapping air bubbles.

Focusing the Microscope

1. **Center the specimen on the stage.** Do this by putting the cover slip under the lens. (If the specimen is large enough, center it with the aid of the naked eye).
2. Set Revolving Nose Piece to the **low power objective lens.**
3. Set the **diaphragm to the #2 light levels.**

Focusing the Microscope cont.

4. Use the **Coarse Adjustment Knob** to move the stage all the way up while **focusing on low**.
5. Re-center your specimen.



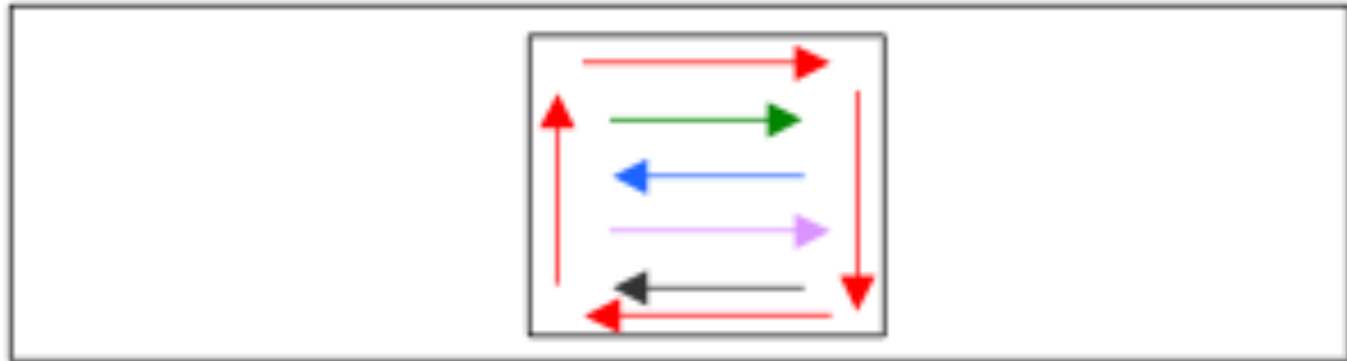
Focusing the Microscope cont.

6. Switch to **medium power** while looking from the side. Focus with the **Course or Fine Adjustment Knob**.
7. When using **high power**, use **only the Fine Adjustment Knob**. You do not want to cause the lens to hit the slide!



How to Find Microscopic Specimens

1. On low or medium power, search the edges of your cover slip.
2. Then use a back and forth search pattern, covering the whole cover slip.
3. If you can't find it in 3-4 minutes, make a new slide.



How to Calculate Magnification Power

A. Ocular power X times objective lens power

B. Complete the following table:

Ocular Power	Objective Lens Power	Total Magnification
10X	Low = 4X	
10X	Medium = 10X	
10X	High = 40X	

How To Get Full Credit For Your Microscope Drawings

Use this format for all your microscopic drawings in this class

1. The circle represents the Field of View seen through the Microscope.
2. The specimen must be drawn the size it looks relative to the Field Of View.
3. Label the specimen and give the **total magnification**.

